

=> d his

(FILE 'HOME' ENTERED AT 14:59:36 ON 28 JUL 2005)

FILE 'REGISTRY' ENTERED AT 15:00:13 ON 28 JUL 2005

E LOTEPRDNOL/CN

L1 2 S E3-E4

FILE 'CAPLUS' ENTERED AT 15:01:26 ON 28 JUL 2005

L2 113 S L1 OR LOTEPRDNOL OR ALREX OR CDDD(W)5604 OR HGP(W)1 OR LENOX

FILE 'REGISTRY' ENTERED AT 15:03:06 ON 28 JUL 2005

E SALBUTAMOL/CN

L3 1 S E3

FILE 'CAPLUS' ENTERED AT 15:06:15 ON 28 JUL 2005

L4 5206 S L3 OR AH(W)3365 OR AIROMIR OR ALBUTEROL OR EOLENE OR ETINOLI

FILE 'REGISTRY' ENTERED AT 15:08:48 ON 28 JUL 2005

E REPROTEROL/CN

L5 1 S E3

FILE 'CAPLUS' ENTERED AT 15:09:59 ON 28 JUL 2005

L6 169 S L5 OR D(W)1959 OR REPROTEROL

FILE 'REGISTRY' ENTERED AT 15:11:18 ON 28 JUL 2005

E SALMETEROL/CN

L7 1 S E3

FILE 'CAPLUS' ENTERED AT 15:11:49 ON 28 JUL 2005

L8 1025 S L7 OR GR(W)33343X OR SALMETEROL

FILE 'REGISTRY' ENTERED AT 15:12:28 ON 28 JUL 2005

E FORMOTEROL/CN

L9 1 S E3

FILE 'CAPLUS' ENTERED AT 15:13:02 ON 28 JUL 2005

L10 766 S L9 OR EFORMOTEROL OR FORMOTEROL OR OXIS

L11 3 S L2(L) (L4 OR L6 OR L8 OR L10)

FILE 'EPFULL, FRFULL, GBFULL, PATDPAFULL, PCTFULL, RDISCLOSURE, USPATFULL, USPAT2' ENTERED AT 15:17:22 ON 28 JUL 2005

L12 151 S L11

checked

FILE 'USPATFULL, USPAT2' ENTERED AT 15:20:08 ON 28 JUL 2005

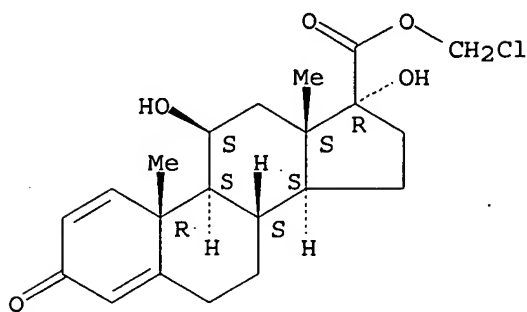
L13 70 S L11

L14 17 S L13 AND (SZELENYI OR POPPE OR HEER OR ENGEL)

checked

L1 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN
RN 129260-79-3 REGISTRY

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

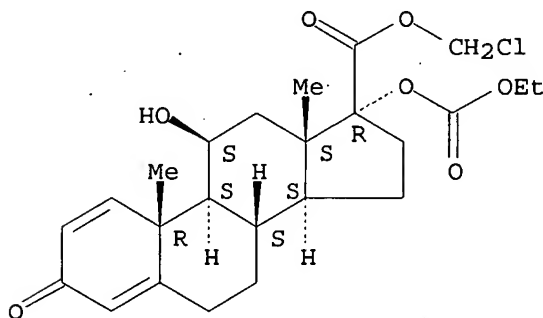
CN Androsta-1,4-diene-17-carboxylic acid, 11,17-dihydroxy-3-oxo-,
chloromethyl ester, (11 β ,17 α)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **Loteprednol**

L1 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN
RN 82034-46-6 REGISTRY

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

CN Androsta-1,4-diene-17-carboxylic acid, 17-[(ethoxycarbonyl)oxy]-11-hydroxy-
3-oxo-, chloromethyl ester, (11 β ,17 α)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Alrex

CN CDDD 5604

CN HGP 1

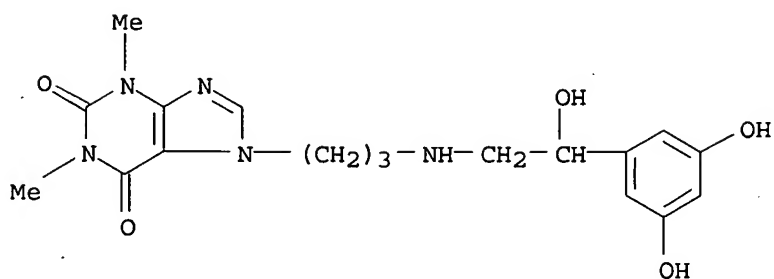
CN Lenoxin

CN Lotemax

CN **Loteprednol etabonate**

CN P 5604

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
RN 54063-54-6 REGISTRY



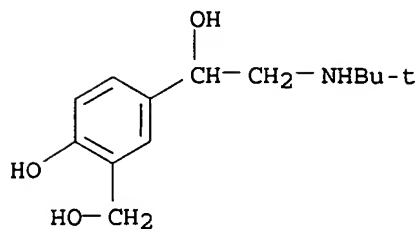
****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

CN 1H-Purine-2,6-dione, 7-[3-[[2-(3,5-dihydroxyphenyl)-2-hydroxyethyl]amino]propyl]-3,7-dihydro-1,3-dimethyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN D 1959

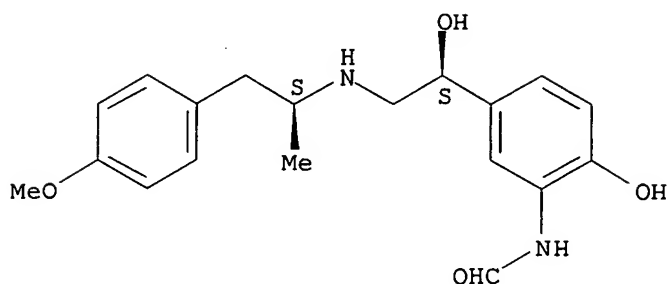
CN **Reproterol**



****PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT****

CN 1,3-Benzenedimethanol, α 1-[[(1,1-dimethylethyl)amino]methyl]-4-hydroxy- (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN m-Xylene- α,α' -diol, α 1-[(tert-butylamino)methyl]-4-hydroxy- (8CI)
 OTHER NAMES:
 CN (+)-Albuterol
 CN (+)-Salbutamol
 CN α 1-tert-Butylaminomethyl-4-hydroxy-m-xylene- α 1, α 3-diol
 CN 1-(tert-Butylaminomethyl)-4-hydroxy-m-xylene- α 1, α 3-diol
 CN 2-(tert-Butylamino)-1-[(4-hydroxy-3-hydroxymethyl)phenyl]ethanol
 CN AH 3365
 CN Airomir
 CN Albuterol
 CN dl-Albuterol
 CN DL-N-tert-Butyl-2(4-hydroxy-3-hydroxymethylphenyl)2-hydroxyethylamine
 CN dl-Salbutamol
 CN Eolene
 CN Etinoline
 CN m-Xylene α,α' -diol, α -[(tert-butylamino)methyl]-4-hydroxy-
 CN Proventil HFA
 CN Proventil Inhaler
 CN **Salbutamol**
 CN Saventol
 CN Spreor
 CN Sultanol
 CN Sultanol N
 CN Ventalin Inhaler
 CN Ventolin
 CN Ventoline
 CN Volmax

Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

CN Formamide, N-[2-hydroxy-5-[(1R)-1-hydroxy-2-[(1R)-2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]phenyl]-, rel- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Formamide, N-[2-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]phenyl]-, (R*,R*)-(±)-

OTHER NAMES:

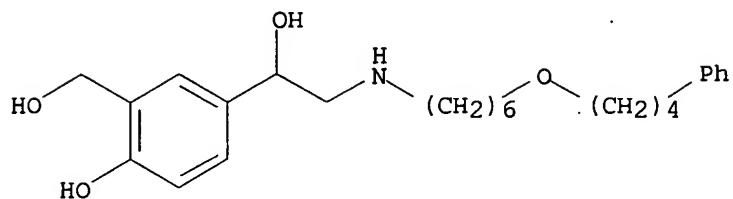
CN (±)Formoterol

CN Eformoterol

CN Formamide, N-[2-hydroxy-5-[1-hydroxy-2-[[2-(4-methoxyphenyl)-1-methylethyl]amino]ethyl]phenyl]-, (R*,R*)-

CN **Formoterol**

CN Oxis



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

CN 1,3-Benzenedimethanol, 4-hydroxy- α 1-[[[6-(4-phenylbutoxy)hexyl]amino]methyl]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1,3-Benzenedimethanol, 4-hydroxy- α 1-[[[6-(4-phenylbutoxy)hexyl]amino]methyl]-, (\pm)-

OTHER NAMES:

CN GR 33343X

CN **Salmeterol**

=> s 12(1) (14 or 16 or 18 or 110)
L11 3 L2(L) (L4 OR L6 OR L8 OR L10)

=> d ibib 1-3

L11 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:346842 CAPLUS
DOCUMENT NUMBER: 142:379418
TITLE: Improvements in or relating to aerosol formulations
comprising formoterol fumarate dihydrate
INVENTOR(S): Mueller-Walz, Rudi
PATENT ASSIGNEE(S): Jagotec A.-G., Switz.
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---|----------|-----------------|----------|
| WO 2005034927 | A2 | 20050421 | WO 2004-IB3465 | 20041008 |
| WO 2005034927 | A3 | 20050602 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |

PRIORITY APPLN. INFO.: GB 2003-23685 A 20031009

L11 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:346830 CAPLUS
DOCUMENT NUMBER: 142:397744
TITLE: Aerosol formulations comprising formoterol fumarate
dihydrate, ethanol and a steroid
INVENTOR(S): Mueller-Walz, Rudi
PATENT ASSIGNEE(S): Jagotec A.-G., Switz.
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|---|----------|-----------------|----------|
| WO 2005034911 | A1 | 20050421 | WO 2004-IB3481 | 20041008 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |

PRIORITY APPLN. INFO.: GB 2003-23684 A 20031009

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2001:247172 CAPLUS
 DOCUMENT NUMBER: 134:256899
 TITLE: Combination of loteprednol and β 2-adrenoceptor agonists for the treatment of allergies and respiratory tract diseases
 INVENTOR(S): Szelenyi, Istvan; Poppe, Hildegard; Heer, Sabine; Engel, Juergen
 PATENT ASSIGNEE(S): Asta Medica Ag, Germany
 SOURCE: PCT Int. Appl., 16 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|------------|
| WO 2001022956 | A2 | 20010405 | WO 2000-EP9392 | 20000926 |
| WO 2001022956 | A3 | 20011011 | | |
| W: AU, BG, BR, BY, CA, CN, CZ, DZ, EE, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, UZ, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| DE 19947235 | A1 | 20010405 | DE 1999-19947235 | 19990930 |
| CA 2389111 | AA | 20010405 | CA 2000-2389111 | 20000926 |
| AU 2000079074 | A5 | 20010430 | AU 2000-79074 | 20000926 |
| BR 2000014374 | A | 20020625 | BR 2000-14374 | 20000926 |
| EP 1216047 | A2 | 20020626 | EP 2000-969304 | 20000926 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| JP 2003510276 | T2 | 20030318 | JP 2001-526168 | 20000926 |
| EE 200200163 | A | 20030415 | EE 2002-163 | 20000926 |
| PRIORITY APPLN. INFO.: | | | | |
| | | | DE 1999-19947235 | A 19990930 |
| | | | WO 2000-EP9392 | W 20000926 |

own PCT

instant
Priority
document

L13 ANSWER 41 OF 70 USPATFULL on STN
 ACCESSION NUMBER: 2002:262040 USPATFULL
 TITLE: Medical aerosol formulations
 INVENTOR(S): Keller, Manfred, Bad Krozingen, GERMANY, FEDERAL
 REPUBLIC OF
 Herzog, Kurt, Basel, SWITZERLAND
 PATENT ASSIGNEE(S): Jago Research AG, Muttentz, SWITZERLAND (non-U.S.
 corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|-----------------------|
| PATENT INFORMATION: | US 6461591 | B1 | 20021008 |
| | WO 9834595 | | 19980813 |
| APPLICATION INFO.: | US 1999-355883 | | 19990804 (9) |
| | WO 1998-CH37 | | 19980202 |
| | | | 19990804 PCT 371 date |

| | NUMBER | DATE |
|-----------------------|---|----------|
| PRIORITY INFORMATION: | CH 1997-248 | 19970205 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | GRANTED | |
| PRIMARY EXAMINER: | Dees, Jose' G. | |
| ASSISTANT EXAMINER: | Choi, Frank | |
| LEGAL REPRESENTATIVE: | Selitto, Behr & Kim | |
| NUMBER OF CLAIMS: | 18 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 12 Drawing Figure(s); 6 Drawing Page(s) | |
| LINE COUNT: | 932 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD beta-mimetics such as **salbutamol**, **formoterol**, **salmeterol**, fenoterol, clenbuterol, terbutaline, bambuterol, broxaterol, epinephrine, isoprenaline, orciprenaline, hexoprenaline, tulobuterol, **reproterol**, bamethan etc.,

DETD corticoids such as beclomethasone, betamethasone, ciclomethasone, dexamethasone, triamcinolone, budesonide, butixocort, ciclesonide, fluticasone, flunisolide, icomethasone, mometasone, tixocortol, **loteprednol** etc.,

DETD 2.25 g of micronized ipratropium bromide and 11.25 g of micronized **salbutamol** are weighed into a pressure addition vessel. After sealing and evacuation thereof, 10.5 kg of HFA 227 which has previously.

DETD 4.5 g of micronized oxitropium bromide and 0.675 g of micronized **formoterol** fumarate are weighed into a pressure addition vessel. After sealing and evacuation thereof, 10.5 kg of HFA 227 which has.

DETD . . . solution is mixed with 7.3 kg of HFA 227. The mixture obtained is added to 9.4 g of initially introduced **salbutamol** sulphate and adequately homogenized. After conclusion of the homogenization, the mixture is diluted with 2 kg of HFA 227 which.

CLM What is claimed is:

. . . aerosol formulation according to claim 1, wherein the pharmaceutically active compound is a beta-mimetic selected from the group consisting of **salbutamol**, **formoterol**, **salmeterol**, fenoterol, clenbuterol, terbutaline, bambuterol, broxaterol, epinephrine, isoprenaline, orciprenaline, hexoprenaline, tulobuterol, **reproterol**, bamethan, and pharmaceutically acceptable salts thereof.

. . . corticoid selected from the group consisting of beclomethasone, betamethasone, ciclomethasone, dexamethasone, triamcinolone, budesonide, butixocort, ciclesonide, fluticasone, flunisolide, icomethasone, mometasone, tixocortol, **loteprednol**, and pharmaceutically acceptable salts thereof.

. . . does inhaler according to claim 10, wherein the pharmaceutically active compound is a beta-mimetic selected from the group consisting of

salbutamol, formoterol, salmeterol, fenoterol, clenbuterol, terbutaline, bambuterol, broxaterol, epinephrine, isoprenaline, orciprenaline, hexoprenaline, tulobuterol, reproterol, bamethan, and pharmaceutically acceptable salts thereof.

. . . corticoid selected from the group consisting of beclomethasone, betamethasone, ciclomethasone, dexamethasone, triamcinolone, budesonide, butixocort, ciclesonide, fluticasone, flunisolide, icomethasone, mometasone, tixocortol, loteprednol, and pharmaceutically acceptable salts thereof.